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STATISTICAL BULLETIN
Metropolitan Life Insurance Co.

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BROADENING THE LIFE SPAN OF THE AMERICAN NEGRO.

In past years, vital statisticians have been pessimistic with respect to the American negro's chance for survival under the increased concentration of members of this race in the cities. In fact, for years there seemed to be a marked tendency toward increase in the death rate of urbanized negroes with an accompanying excess of deaths over births. This, some students contended, would lead eventually to the extinction of the city negro. But the plain facts for recent years are entirely opposed to this view, and this can best be seen from the mortality records of negroes insured in the Industrial Department of the Metropolitan Life Insurance Company. These negroes are, for the most part, urban dwellers in Southern as well as Northern communities.

Life-tables show more fittingly than do other measures of mortality just what changes occur from time to time in the expected after-lifespan of population groups. In the two years, 1911-1912, the expected lifespan for colored male policyholders at age ten was 41.32 years; in 1922, the expectation was 46.74 years, an increase of about 5½ years or 13.1 per cent. This broadening of the lifespan among negro males may be compared with an increase of 6.3 years or 13.8 per cent. for insured white males over the same period. Among negro females at age ten the expectation increased from 41.30 years in 1911-1912 to 46.07 years in 1922, which is a gain of about 5 years or 11.5 per cent. This is a decidedly better record than the increase of 3.8 years, or 7.5 per cent., for insured white females.

These figures show what has happened to promote the general well-being of the American negro. When the lifespan of a people lengthens by as much as five years over a decade, it is indicative of far-reaching changes in conditions of life and labor. There is no

longer any room for the gloomy pessimism respecting the negro's chance for survival. The members of this race have benefited decidedly and are improving their longevity prospect constantly from wider economic opportunities and from public health measures.

The northward migration of the race in recent years has probably not had any effect, adversely or otherwise, upon the mortality rates of this insured group. In 1922, 41 per cent. of the Company's business on negro lives was done in the South and Southwest, and while this figure is slightly less than that for former years, the change of residence has apparently not had any effect on the life-expectancy figures quoted above. The fact is, that North and South, the condition of the urban negro has steadily improved and there is no indication that this tendency will slacken. While negro mortality is still much in excess of that among white persons, the gap between the rates for the two races is being closed. Tuberculosis, typhoid fever, malaria and other diseases which were responsible for excessive death rates among negroes a decade ago are being brought under control. This is being accomplished by the organized public health movement and by the negroes themselves through their press and other facilities for dissemination of instruction in hygiene. The most powerful factor of all, however, is the rise in the level of well-being for the negro, brought about by better economic conditions.

In the table on page 3 we show the expectation of life among colored males and females in 1922 as compared with 1911-1912 at selected ages.

Expectation of Life at Selected Ages, 1922 and 1911-1912. Colored Males and Females.

Metropolitan Life Insurance Company. Industrial Department.

Age	Colored Males		Colored Females	
	1922	1911–1912	1922	1911–1912
10	46.74	41.32	46.07	41.30
15	42.39	37.42	42.19	37.83
20	38.60	34.16	38.78	35.14
25	35.20	31.11	35.49	32.39
30	31.75	27.95	32.13	29.32
35	28.27	24.90	28.66	26.30
40	24.85	21.91	25.23	23.25
45	21.73	18.93	21.94	20.25
50	18.63	16.09	18.86	17.34
55	15.77	13.48	15.80	14.60
60	13.15	11.21	12.90	12.20
70	8.56	7.69	8.54	8.61
80	5.73	5.34	5.77	5.81
90	3.98	3.84	4.22	4.30

LESSONS FROM THE AGE STATISTICS OF CANCER MORTALITY IN RECENT YEARS.

Cancer mortality is not increasing uniformly at the several age divisions of life. The facts for Industrial policyholders of this Company show a slight fall in the cancer deathrate between 35 and 55 years in the period 1911 to 1922. This may mean that there has been a slight response to the extensive campaign of education in cancer prevention during the past six or seven years. Persons in this age range are more amenable to instruction, come more often under medical supervision in the course of treatment for minor, acute illness, or during periodical health examination, and are, in general, the group that has absorbed and is applying the hygienic lessons taught through the public press by health organizations. The decline in cancer mortality is slight, to be sure, and we do not wish to exaggerate the importance of the gain. But any favorable tendency in cancer mortality is a source of comfort to the general public. Between 35 and 55 years of age the cancer deathrate has declined, on the average, about one-half of 1 per cent. per year during the period 1911 to 1922.

Beyond 55 years of age, we have noted in our records a slight rising tendency; the more advanced the age, the greater the rate of

increase of cancer mortality. At the age group 55 to 64 years, the rate increased six-tenths of 1 per cent. per year, and above 65 years, the increase in the deathrate was about one and one-half per cent. per year during the twelve calendar years 1911 to 1922. The gravity of the cancer situation is concentrated at the older ages of life and apparently little or no effect is as yet in evidence from the organized effort of the medical profession or public health authorities.

The net effect of these tendencies toward rise or fall at the several age divisions is to show an increase in the standardized deathrate, at all ages combined, of seven-tenths of 1 per cent. per year. In the following table we show the facts for the several age divisions:

Mortality from Cancer—all Forms. Deathrate Per 100,000, Absolute and Percentage Annual Increase or Decrease in Deathrate for Period 1911 to 1922. By Age Divisions.

Metropolitan Life Insurance Company. Industrial Department.

Age Period	Deathrate per 100,000 1911 to 1922	Average Annual Increase or Decrease, 1911 to 1922	
		Absolute (in deaths per 100,000 per year)	Percentage of deathrate, 1911 to 1922
All ages—one and over	78.5*	+ .58	+ .73
1 to 24	2.7	+ .03	+1.00
25 to 34	16.3	+ .06	+ .37
35 to 44	75.0	— .37	— .49
45 to 54	196.2	— .89	— .45
55 to 64	390.3	+2.49	+ .64
65 to 74	648.1	+9.14	+1.41
75 and over	879.2	+13.62	+1.55
Group Ages:			
25 and over	156.7*	+1.11	+ .71
45 and over	324.5*	+2.87	+ .88

*Based upon "standardized" deathrates, *i. e.*, the color, sex and age composition of the group has been held constant throughout the period 1911 to 1922.

The significance of the figures of increased mortality at the ages beyond 55 cannot be determined until further inquiry is made into the facts for the several color and sex classes, and for cancers of various organs and parts. This we shall consider in future issues of the Bulletin. At the present time, we may say that the in-

creases were more pronounced for males than for females. A comparison of the per cent. increase per year in cancer deathrates of the several color and sex groups is shown below:

Percentage Increase or Decrease in Cancer Deathrates Per Year at Specified Age Divisions, 1911 to 1922, by Color and Sex. Metropolitan Life Insurance Company. Industrial Department.

Age Period	White		Colored	
	Males	Females	Males	Females
All ages—one and over	+1.41*	+.21*	+2.97*	—.05*
1 to 24	+1.07	+.08	+6.86	+2.59
25 to 34	+.87	+.80	+.22	—1.23
35 to 44	+.19	—.91	+1.82	—.34
45 to 54	+.44	—.73	—.40	—1.25
55 to 64	+1.46	+.05	+2.19	+.71
65 to 74	+2.06	+.75	+5.48	+2.97
75 and over	+1.94	+1.61	+5.38	—4.24
Group Ages:				
25 and over	+1.43*	+.19*	+2.84*	—.09*
45 and over	+1.54*	+.32*	+3.09*	+.05*

*"Standardized" deathrate.

HAZARD FACTORS IN THE ACCIDENT MORTALITY RECORD.

In 1922, nearly one-half (46 per cent.) of the fatal accidents among Metropolitan Industrial policyholders arose out of hazards in the use of public facilities, that is to say, in the use of streets and highways, means of transportation, public buildings, or in places for sport and recreation operated for the general use of the public! Of these fatal public accidents, 42 per cent. arose out of the pedestrian use of streets; 47 per cent. were automobile accidents. For all automobile accidents, one-quarter occurred among passengers and nearly two-thirds among pedestrians. The outstanding safety problem in the United States today is to study and control accidents to the general public, especially with regard to the pedestrian and his exposure to injury by the automobile!

In the table on page 6, we show age statistics on the hazard origin of fatal accidents.

Percentage of Total Accidental Deaths Arising Out of Specified Hazard at Each Age Group. Death Rate Per 100,000 Persons Exposed.

Metropolitan Life Insurance Company. Industrial Department. 1922.

Age Period	PERCENTAGE OF ALL ACCIDENTS					DEATH RATE PER 100,000 EXPOSED				
	All Accidents	Origin of Hazard				All Accidents	Origin of Hazard			
		Ind'l Accidents	Public Accidents	Domestic Accdts.	Other & not Spec. Accdts.		Ind'l Accidents	Public Accidents	Domestic Accdts.	Other & not Spec. Accdts.
All ages—one and over ...	100.0	16.7	46.3	15.2	21.8	57.7	9.6	26.7	8.8	12.6
Under 15.....	100.0	.3	59.2	18.1	22.4	53.7	.1	31.8	9.7	12.1
Ages 15 to 64..	100.0	27.3	41.7	11.0	20.0	53.7	14.6	22.4	5.9	10.7
15 to 24..	100.0	21.6	55.9	5.5	17.0	46.2	10.0	25.8	2.5	7.9
25 to 34..	100.0	28.4	40.1	9.7	21.8	42.3	12.0	17.0	4.1	9.2
35 to 44..	100.0	36.2	35.2	9.0	19.6	51.3	18.6	18.1	4.6	10.1
45 to 54..	100.0	30.3	34.8	15.4	19.5	66.5	20.2	23.1	10.3	12.9
55 to 64..	100.0	22.1	34.9	19.6	23.4	98.6	21.8	34.4	19.3	23.1
65 & over.....	100.0	10.1	28.4	30.6	30.8	203.6	20.7	57.9	62.2	62.8

At all ages combined, industrial accidents were next in numerical importance to public accidents, accounting for 16.7 per cent. of all fatal accidents in 1922. Domestic accidents, that is, where the hazard arose in or about the home, were responsible for 15 per cent. of the deaths.

The age characteristics of these several hazard classes are of interest. Industrial accidents show a rate varying between 10 and 22 per 100,000 policyholders in the age range 15 to 64 years. Public accidents have high rates in childhood and in old age, with a minimum of 17 deaths per 100,000 policyholders at the age group 25 to 34 years. Domestic accidents show, as may be expected, a high rate in childhood, with a minimum at the age period 15 to 24 years, and a sharp rise to a figure of 62 deaths per 100,000 policyholders at the age division 65 years and over.

The safety movement has, therefore, to direct its attention to specific levels of the population, both with respect to the nature of the hazard to be controlled, and to the age-ranges affected. Practically nothing has been done in recent years to combat the accident hazards of domestic life; yet at the ages beyond 65 years, domestic hazards give rise to a higher deathrate than that recorded for industrial or public accidents!

TREND OF THE SYPHILIS DEATHRATE.

Prior to 1918, the syphilis deathrate showed a rising tendency; in 1918 and in 1919 a sharp reduction occurred, and for the three succeeding years the mortality figure remained practically stationary in the entire experience of the Industrial Department of this Company. But this reflects primarily the situation among the insured white population. Among negro policyholders, lower rates were experienced in 1918 and 1919 for males, and in the three years 1919 to 1921 among females. A rising tendency has been noted among these colored policyholders since 1920. The figures used in this study relate to persons 25 to 64 years of age and under syphilis is included also the returns for locomotor ataxia and general paralysis of the insane. In the following table and the graph on the next page we show these facts.

Combined Deathrates for Syphilis, Locomotor Ataxia and General Paralysis of the Insane. Age Division 25 to 64 Years. By Color and Sex. 1911 to 1922.

Metropolitan Life Insurance Company. Industrial Department.

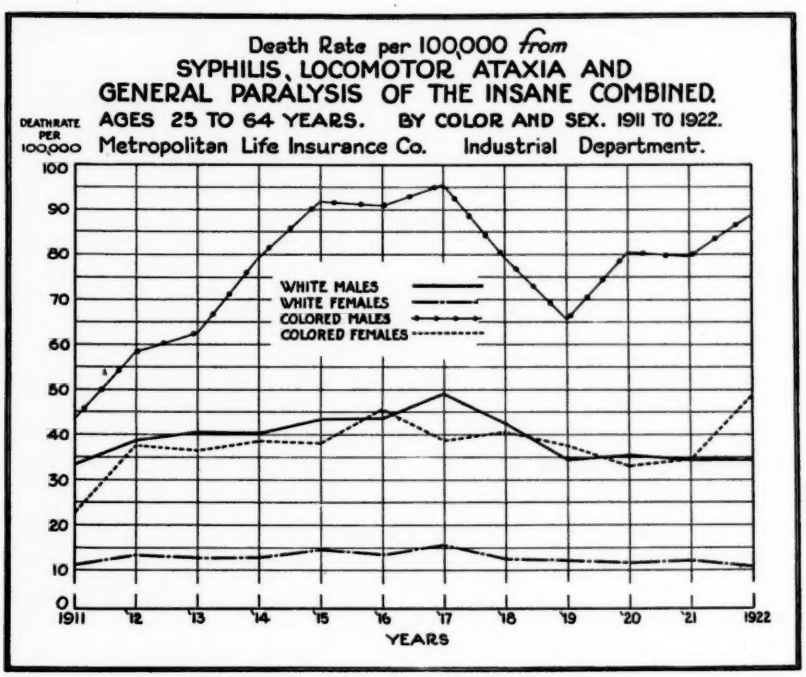
Year	Total Ind'l. Department	White		Colored	
		Males	Females	Males	Females
1922	26.9	34.1	10.7	88.6	48.5
1921	25.8	34.2	11.9	79.7	34.3
1920	26.0	35.3	11.6	80.3	32.9
1919	25.4	34.5	12.0	65.5	37.5
1918	29.7	42.4	12.6	79.4	40.4
1917	34.3	49.0	15.6	95.4	38.7
1916	31.8	43.6	13.6	90.9	45.6
1915	31.5	43.3	14.5	91.8	38.0
1914	28.9	40.1	12.9	79.2	38.4
1913	27.5	40.3	12.5	62.4	36.5
1912	27.2	38.7	13.1	58.5	37.4
1911	22.1	33.4	11.0	43.6	22.8

The lower deathrates since 1917 have been attributed to the campaign for venereal disease prevention instituted as a war measure and actively carried on among the troops and the civilian population adjacent to cantonment camps. The data for syphilis mortality in the period twenty-five to thirty-four years show declines among white and colored males during and after the war. The minimum rate was recorded in 1921 for both groups. Since the war, a number of states and cities have been cooperating with

the United States Public Health Service, or acting on their own initiative, in establishing facilities for effective treatment and for the education of the public in venereal disease prevention. That such work has been effective is indicated by the fact that among the white population the gains which resulted from war activities were held and the rising tendency of pre-war years seems to have been checked.

But among negroes the gains during the war have been followed by a rising deathrate. Among colored males, the 1922 syphilis death-rate closely approached the maximum pre-war figure, and for colored females the 1922 rate was higher than that for any year on record in the series 1911 to 1921.

Obviously, venereal disease control measures need to be extended among the negro population so that the lower deathrates of the war years may again be attained and perhaps excelled. A consistent rise in venereal disease mortality in any group of the population should be vigorously combatted, because with respect to syphilis, the well-being of the whole population is menaced.



HEALTH RECORD FOR AUGUST, 1923.

The death rate for August (7.7 per 1,000) was not only the lowest monthly figure for 1923, to date, but the lowest August rate ever recorded among Metropolitan Industrial policyholders with the single exception of August, 1919 (7.6). There was a marked decline as compared with the same month of last year and a slight decrease from the July figure of this year. This last is unusual; since in most years the rate rises slightly between July and August.

The favorable showing for the month is due largely to lower mortality from tuberculosis, heart disease, cerebral hemorrhage, Bright's disease and pneumonia. The August deathrates for cerebral hemorrhage and Bright's disease (47.5 and 58.3 per 100,000 respectively) stand as the lowest ever recorded for these diseases in any month. The typhoid fever figure increased from 6.7 per 100,000, in July, to 8.2. This is a seasonal increase and is, therefore, expected. It is nevertheless a very low August typhoid deathrate—the lowest figure ever recorded for that month; although in August, 1920, an identical rate was registered. With the "typhoid season" now fairly well advanced, the cumulative mortality from this disease is below last year's figure for the corresponding part of the year. As that figure marked the minimum ever registered up to that time, it is obvious that unless there are unfavorable developments during the fall, a new minimum typhoid deathrate will be registered this year.

The accident situation continues unsatisfactory. The deathrate declined slightly, it is true, from the July figure, but it is much higher than that for August, 1922. Automobile fatalities increased from 15.1 per 100,000 in July to 18.4, and the latter figure compares unfavorably with 15.4 for August, 1922.

The general deathrate for the large cities of the United States in August was 10.6 per 1,000 population. This is the same as the figures for the previous month and for August, 1922. Increased diphtheria, malaria and typhoid fever morbidity was noted during August, but there were declines in the case incidence of measles, scarlet fever, smallpox and whooping cough. As compared with August of last year there were fewer recorded cases of diphtheria, malaria and whooping cough, but there was more measles, scarlet fever, smallpox and typhoid fever.

Typhoid fever cases increased, notably in North Carolina, with a rise from 243 cases during the first three weeks of July to 309 during the corresponding weeks of August. In Greensboro 62 cases of the

disease have been reported since the latter part of June in an outbreak believed to be due to contaminated milk supplies. In Everett, Washington, physicians have been caring for 50 cases of typhoid due to pollution of the city water supply caused by a careless employee who left a safety valve open for two weeks. An outbreak in Elmira, New York, was probably due to infected ice. A mild epidemic, apparently milk-borne, appeared in Peoria, Illinois. The Kansas State Board of Health sent out a general warning early in August to the effect that conditions were favorable for an epidemic during the late summer and fall, as a result of heavy precipitation in the spring and early summer. This left much stagnant flood water and caused the pollution of many sources of supply. In several sections of Texas typhoid fever outbreaks have occurred which have been attributed to stream pollution.

The August increase in the case incidence of diphtheria was slight. In North Carolina, however, there were 179 cases during the first three weeks of the month as compared with 67 during the first three weeks of July. The Commissioner of Health of Baltimore has established additional diphtheria clinics in order to be able to test every child before the schools open in the fall.

Although smallpox declined throughout the country in August there was an outbreak in Walnut Grove Township, Knox County, Illinois, where it became necessary to establish quarantine.

It is stated that a number of schools in Kansas will not open on scheduled time this year because of the presence of poliomyelitis. In Topeka, and in Shawnee County, the disease has been particularly prevalent. Quite a number of cases have been reported from Pennsylvania sections, more particularly from the west side of the Wyoming Valley, from Wilkes-Barre and from Hanover Township, Luzerne County.

Measles is still more prevalent than last year but the case incidence was much less in August than in July.

In Virginia, a disease popularly termed "Devil's Grip" which appeared late in May has proved perplexing to the health authorities. This disease has not been accompanied by much mortality; the morbidity, however, has been considerable, especially in the "Northern Neck" which lies between the Potomac and Rappahannock Rivers near the Maryland line.

The table below shows the mortality among Industrial policyholders for August, 1923, July, 1923, August, 1922 and for the year 1922:

METROPOLITAN LIFE INSURANCE COMPANY.

Death Rates per 100,000 for Principal Causes, Premium-paying Business in Industrial Department.

(Annual Basis)

MONTHS OF JULY AND AUGUST, 1923, AND OF AUGUST, 1922.

CAUSES OF DEATH	RATE PER 100,000 LIVES EXPOSED			
	Aug., 1923	July, 1923	Aug., 1922	Year 1922
TOTAL—ALL CAUSES	770.3	795.8	815.5	882.9
Typhoid fever	8.2	6.7	8.9	5.7
Measles	4.1	7.1	3.0	4.3
Scarlet fever	1.4	2.1	2.0	4.9
Whooping cough	4.8	4.8	3.1	2.6
Diphtheria	9.0	7.9	9.1	18.0
Influenza	4.0	4.5	3.8	21.7
Tuberculosis (all forms)	105.2	107.8	114.9	114.2
Tuberculosis of resp'y system	94.1	96.6	104.8	103.6
Cancer	68.1	69.0	74.3	72.0
Diabetes mellitus	12.3	11.6	*	17.2
Cerebral hemorrhage	47.5	51.0	56.2	62.9
Organic diseases of heart	104.8	113.0	111.6	126.7
Pneumonia (all forms)	29.1	33.3	26.7	73.7
Other respiratory diseases	7.8	9.8	10.4	13.7
Diarrhea and enteritis	23.2	17.6	17.2	10.8
Bright's disease (chronic nephritis)	58.3	59.7	64.5	70.3
Puerperal state	13.2	17.6	16.4	19.0
Suicides	5.8	7.1	8.0	7.5
Homicides	7.5	6.9	6.4	6.3
Other external causes (excluding suicides and homicides)	73.8	76.9	67.2	58.1
Traumatism by automobile	18.4	15.1	15.4	13.6
All other causes	182.3	181.4	211.9	173.3

*Not available.

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DEATHRATE PER 1,000
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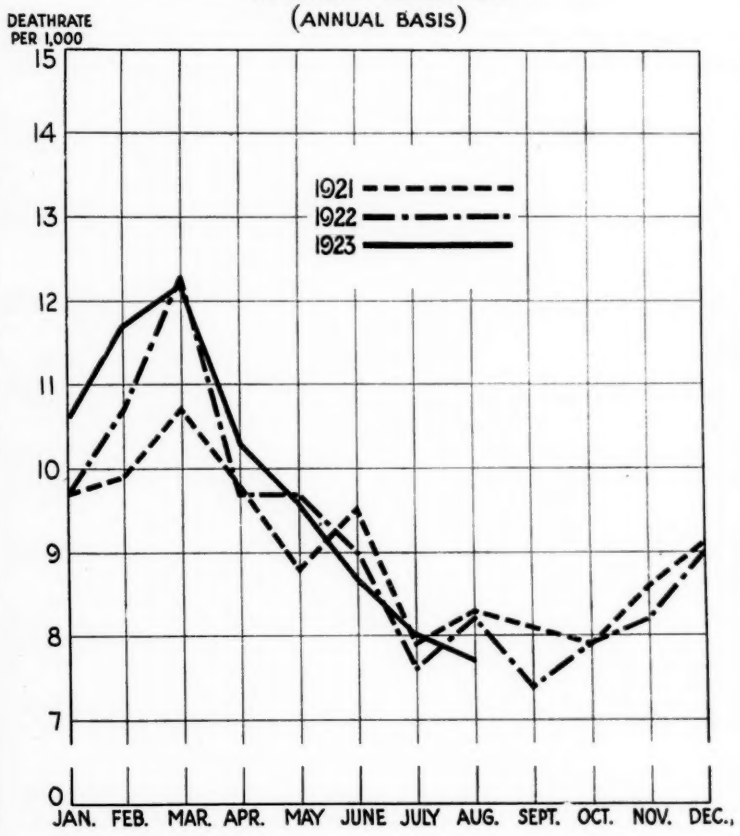
1921-1922-1923

METROPOLITAN LIFE INSURANCE COMPANY
INDUSTRIAL DEPARTMENT
(ANNUAL BASIS)



	1921	1922	1923
JAN.	9.7	9.7	10.6
FEB.	9.9	10.7	11.7
MAR.	10.7	12.3	12.2
APR.	9.8	9.7	10.3
MAY	8.8	9.7	9.6
JUNE	9.5	9.0	8.8

	1921	1922	1923
JULY	7.9	7.6	8.0
AUG.	8.3	8.2	7.7
SEPT.	8.1	7.4	
OCT.	7.9	7.9	
NOV.	8.6	8.2	
DEC.	9.1	9.0	

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